

### **Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the Application. It includes the amendments of the previous non-compliant amendment and the correction requested by the Notice of Non-Compliant Amendment issued on January 6, 2009.

#### **Listing of Claims:**

1. (currently amended) A method of tuning an application deployed in an application server, comprising a processor operable to execute computer program instructions, a memory operable to store the computer program instructions executable by the processor, and the computer program instructions stored in the memory and executable to perform the steps of:

deploying the application in the application server;

invoking an application tuning server-side component operable to retrieve information relating to parameters of the deployed application that are to be tuned, comprising current values of the parameters of the deployed application that are to be tuned and measurements of performance of the application effected by the current values of the parameters;

displaying the information specifically relating to a parameter of the parameters of the deployed application and at least one measurement of performance of the application effected by the current value of the parameter in response to the selection of an object associated with the parameter from a display;

receiving specifications of values of application tuning parameters;

tuning the deployed application using the received specified parameter values by modifying ~~the values~~ the current value of ~~the parameters~~ the parameter being used by the deployed application; and

displaying ~~a measurement of an effect of the modification of~~ the value of ~~the parameters~~ the parameter of the deployed application ~~on system and application performance to the at least one measurement of the performance of the application in the display of the information specifically relating to the parameter~~ in real time.

2. (original) The method of claim 1, wherein the step of invoking the application tuning server-side component is performed in response to an action by an administrator, engineer, or user of the application server.

3. (canceled)

4. (previously presented) The method of claim 3, wherein the application tuning server-side component is operable to accept input from the administrator, engineer, or user specifying values of the application parameters of the deployed application that are to be tuned.

5. (previously presented) The method of claim 4, wherein the specified values of the application parameters of the deployed application that are to be tuned comprise at least one of:

database connection pool size, thread pool size, HTTP connection pool size,

HTTP incoming connection queue length, HTTP Socket timeout, session pool size, and Java Virtual Machine tuning parameters.

6. (previously presented) The method of claim 5, wherein the measurements of performance of the application comprise at least one of:

overall transactions per second, average request time, HTTP transactions per second, database connections used, HTTP connections used, active thread count, overall throughput, database throughput, HTTP throughput.

7. (original) The method of claim 6, wherein the application tuning server-side component is implemented using Java Management Extensions.

8. (currently amended) A system for tuning an application deployed in an application server comprising:

a processor operable to execute computer program instructions;

a memory operable to store the computer program instructions executable by the processor; and

the computer program instructions stored in the memory and executable to perform the steps of:

deploying the application in the application server;

invoking an application tuning server-side component operable to retrieve information relating to parameters of the deployed application that are to be tuned,

comprising current values of the parameters of the deployed application that are to be  
tuned and measurements of performance of the application effected by the current values  
of the parameters;

displaying the information specifically relating to a parameter of the parameters  
of the deployed application and at least one measurement of performance of the  
application effected by the current value of the parameter in response to the selection of  
an object associated with the parameter from a display;

receiving specifications of values of application tuning parameters;

tuning the deployed application using the received specified parameter values by  
modifying ~~the values~~ the current value of the parameters the parameter being used by the  
deployed application; and

displaying ~~a measurement of an effect of the modification of the values~~ the value  
~~of the parameters~~ the parameter of the deployed application ~~on system and application~~  
~~performance to the~~ at least one measurement of the performance of the application in the  
display of the information specifically relating to the parameter in real time.

9. (original) The system of claim 8, wherein the step of invoking the application  
tuning server-side component is performed in response to an action by an administrator,  
engineer, or user of the application server.

10. (canceled)

11. (previously presented) The system of claim 10, wherein the application tuning

server-side component is operable to accept input from the administrator, engineer, or user specifying values of the parameters of the deployed application that are to be tuned.

12. (previously presented) The system of claim 11, wherein the specified values of the parameters of the deployed application that are to be tuned comprise at least one of:

database connection pool size, thread pool size, HTTP connection pool size, HTTP incoming connection queue length, HTTP Socket timeout, session pool size, and Java Virtual Machine tuning parameters.

13. (previously presented) The system of claim 12, wherein the measurements of performance of the application comprise at least one of:

overall transactions per second, average request time, HTTP transactions per second, database connections used, HTTP connections used, active thread count, overall throughput, database throughput, HTTP throughput.

14. (original) The system of claim 13, wherein the application tuning server-side component is implemented using Java Management Extensions.

15. (currently amended) A computer program product for tuning an application deployed in an application server comprising:

a computer readable storage medium;

computer program instructions, recorded on the computer readable storage medium, executable by a processor, for performing the steps of:

deploying the application in the application server;

invoking an application tuning server-side component operable to retrieve information relating to parameters of the deployed application that are to be tuned, comprising current values of the parameters of the deployed application that are to be tuned and measurements of performance of the application effected by the current values of the parameters;

displaying information relating to a specific parameter of the parameters of the deployed application and at least one measurement of performance of the application effected by the current value of the specific parameter in response to the selection of an object associated with the specific parameter from a display;

receiving specifications of values of application tuning parameters;

tuning the deployed application using the received specified parameter values by modifying ~~the values~~ the current value of ~~the parameters~~ the parameter being used by the deployed application; and

~~displaying a measurement of an effect of the modification of the values~~ the value of ~~the parameters~~ the specific parameter of the deployed application ~~on system and application performance to the at least one measurement of the performance of the application in the display of the information relating to the parameter~~ in real time.

16. (original) The computer program product of claim 15, wherein the step of invoking the application tuning server-side component is performed in response to an action by an administrator, engineer, or user of the application server.

17. (canceled)

18. (previously presented) The computer program product of claim 17, wherein the application tuning server-side component is operable to accept input from the administrator, engineer, or user specifying values of the parameters of the deployed application that are to be tuned.

19. (previously presented) The computer program product of claim 18, wherein the specified values of the application parameters of the deployed application that are to be tuned comprise at least one of:

database connection pool size, thread pool size, HTTP connection pool size, HTTP incoming connection queue length, HTTP Socket timeout, session pool size, and Java Virtual Machine tuning parameters.

20. (previously presented) The computer program product of claim 19, wherein the measurements of performance of the application comprise at least one of: overall transactions per second, average request time, HTTP transactions per second, database connections used, HTTP connections used, active thread count, overall throughput, database throughput, HTTP throughput.

21. (original) The computer program product of claim 20, wherein the application tuning server-side component is implemented using Java Management Extensions.

22. (currently amended) An application tuning server-side component operable to tune an application deployed in an application server comprising a processor operable to execute computer program instructions, a memory operable to store the computer program instructions executable by the processor, and wherein the application tuning server-side component is embodied in computer program instructions stored in the memory and executable to perform the steps of:

retrieving information relating to parameters of the deployed application that are to be tuned, comprising current values of parameters of the deployed application that are to be tuned and measurements of performance of the application effected by the current values of the parameters;

displaying information relating to a specific parameter of the parameters of the deployed application and at least one measurement of performance of the application effected by the current value of the specific parameter in response to the selection of an object associated with the specific parameter from a display;

receiving specifications of values of application tuning parameters;  
tuning the deployed application using the received specified parameter values by modifying ~~the values~~ the current value of ~~the parameters~~ the parameter being used by the deployed application; and

~~displaying a measurement of an effect of the modification of the values~~ the value of ~~the parameters~~ the specific parameter of the deployed application ~~on system and~~



~~application performance~~ to the at least one measurement of the performance of the application in the display of the information relating to the parameter in real time.

23. (original) The application tuning server-side component of claim 22, wherein the application tuning server-side component is invoked in response to an action by an administrator, engineer, or user of the application server.

24. (canceled)

25. (previously presented) The application tuning server-side component of claim 24, wherein the application tuning server-side component is operable to accept input from the administrator, engineer, or user specifying values of the parameters of the deployed application that are to be tuned.

26. (original) The application tuning server-side component of claim 25, wherein the application tuning server-side component is implemented using Java Management Extensions.

27. (previously presented) The application tuning server-side component of claim 26, wherein the specified values of the parameters of the deployed application that are to be tuned comprise at least one of:

database connection pool size, thread pool size, HTTP connection pool size, HTTP incoming connection queue length, HTTP Socket timeout, session pool size, and Java Virtual Machine tuning parameters.

28. (previously presented) The application tuning server-side component of claim 27, wherein the measurements of performance of the application comprise at least one of:

overall transactions per second, average request time, HTTP transactions per second, database connections used, HTTP connections used, active thread count, overall throughput, database throughput, HTTP throughput.